

HOUSE OF REPRESENTATIVES STAFF ANALYSIS

BILL #: PCB ANRS 12-07 Numeric Nutrient Criteria
SPONSOR(S): Agriculture & Natural Resources Subcommittee
TIED BILLS: **IDEN./SIM. BILLS:**

REFERENCE	ACTION	ANALYST	STAFF DIRECTOR or BUDGET/POLICY CHIEF
Orig. Comm.: Agriculture & Natural Resources Subcommittee	15 Y, 0 N	Camechis	Blalock

SUMMARY ANALYSIS

In 2009, the U.S. Environmental Protection Agency (EPA) determined that Florida's regulation of nitrogen and phosphorus ("nutrients") pollution in Florida waters is insufficient to protect water quality as required by the federal Clean Water Act. As a result, in 2010, the EPA finalized rules that impose federal numeric nutrient criteria on lakes and springs throughout the state and flowing waters outside of the southern Florida region. These EPA rules are scheduled to take effect in March 2012 unless the effective date is extended to June 2012, as requested by the EPA. In addition, the EPA plans, consistent with its obligations under a federal consent decree, to adopt within the next year similar numeric nutrient limits for coastal and estuarine waters throughout the state and flowing waters in the southern Florida region. However, the Clean Water Act allows for withdrawal of the EPA rules if Florida adopts its own rules imposing nutrient limits and the EPA finds those rules to be consistent with the Clean Water Act. The Florida Department of Environmental Protection (DEP) has proposed numeric nutrient criteria rules to replace the EPA's rules, but the EPA cannot formally approve DEP's rules until DEP adopts the rules and the rules are ratified by the Legislature or exempt from ratification. Unless DEP's rules are approved by the EPA under the federal Clean Water Act, the EPA's rules will take effect in Florida.

Current law requires an adopted state agency rule to be ratified by the Legislature before taking effect if the economic impact of the rule exceeds specified dollar thresholds; however, an agency rule may not be ratified by the Legislature until adopted by the agency as a final rule. The DEP's proposed numeric nutrient criteria rules exceed the economic impact dollar thresholds, but DEP has been unable to adopt the rules due to an ongoing administrative rule challenge, which is scheduled for hearing from February 27, 2012 through March 2, 2012. DEP is not allowed by law to adopt the proposed rules as final rules until after a decision is issued by the judge in the administrative rule challenge, which is unlikely to occur until after the 2012 Regular Session concludes. Thus, it is unlikely that adopted rules will be available for ratification by the Legislature during the 2012 Regular Session.

In order to facilitate the EPA's review of DEP's numeric nutrient criteria rules, this bill exempts DEP's proposed numeric nutrient criteria rules, as approved by the Florida Environmental Regulation Commission on December 8, 2011, from the legislative ratification requirement in s. 120.541(3), F.S. The bill also requires DEP to publish, when the rules are adopted, notice of the exemption from ratification.

The bill provides that, after adoption of proposed Rule 62-302.531(9), a non-severability and effective date provision approved by the Florida Environmental Regulation Commission on December 8, 2011, in accordance with its legislative authority in s. 403.804, F.S., any subsequent rule or amendment altering the effect of that rule must be submitted to the President of the Senate and Speaker of the House of Representatives for legislative ratification prior to taking effect.

Lastly, the bill requires DEP to submit its proposed numeric nutrient criteria rules to the EPA for review under the Clean Water Act within 30 days after the effective date of this bill.

Although this bill does not have a direct fiscal impact, if DEP's proposed numeric nutrient criteria rules are implemented and applied to all Florida waters, the DEP estimates that implementation will cost affected parties between \$51 and \$150 million annually. These costs are significantly less than the estimated cost to implement the final EPA rules that only apply to lakes and springs in the state and flowing waters outside of the southern region of Florida, which are scheduled to take effect on March 6, 2012, unless the effective date is extended to June 4, 2012, as proposed by the EPA. Please see Attachment 2 for a more detailed discussion of the costs associated with implementing DEP's proposed rules.

This document does not reflect the intent or official position of the bill sponsor or House of Representatives.

STORAGE NAME: pcb07a.ANRS

DATE: 1/24/2012

FULL ANALYSIS

I. SUBSTANTIVE ANALYSIS

A. EFFECT OF PROPOSED CHANGES:

Effect of Proposed Changes

In order to facilitate the EPA's review of DEP's numeric nutrient criteria rules, this bill exempts DEP's proposed rules, as approved by the Florida Environmental Regulation Commission on December 8, 2011, from the legislative ratification requirement in s. 120.541(3), F.S. The bill also requires DEP to publish, when the rules are adopted, notice of the exemption from ratification.

The bill provides that, after adoption of proposed Rule 62-302.531(9), a non-severability and effective date provision approved by the Florida Environmental Regulation Commission on December 8, 2011, in accordance with its legislative authority in s. 403.804, F.S., any subsequent rule or amendment altering the effect of that rule must be submitted to the President of the Senate and Speaker of the House of Representatives for legislative ratification prior to taking effect.

Lastly, the bill requires DEP to submit, within 30 days after the effective date of this bill, its proposed numeric nutrient criteria rules to the EPA for review under the Clean Water Act.

Present Situation

Nutrient Pollution Generally

Nitrogen and phosphorus ("nutrients") are natural components of aquatic ecosystems. However, what is considered a healthy and safe level of nutrients varies greatly throughout the state depending on the site specific characteristics of a given waterbody. The problems associated with excess nutrients arise when nutrients occur over large areas of a waterbody for extended periods of time at levels that exceed what is "natural" for the particular system.

Nitrogen and phosphorus pollution (also known as "nutrient pollution") is a significant contributor to water quality problems. Nutrient pollution originates from stormwater runoff, wastewater treatment, industrial discharges, fertilization of crops, and livestock manure. Nitrogen also forms from the burning of fossil fuels, like gasoline.

Nutrient pollution causes harmful algae blooms which produce toxins harmful to humans, deplete oxygen needed for fish and shellfish survival, smother vegetation, and discolor water. It can also result in the formation of byproducts in drinking water from disinfection chemicals, some of which have been linked with serious human illnesses. DEP recently found that 16% of Florida's assessed river and stream miles, 36% of assessed lake acres, and 25% of assessed estuary square miles are impaired by nutrients (2008 Integrated Water Quality Report).¹

Federal Law

General Federal Structure

Under the federal structure established in the U.S. Constitution, states may not be compelled by the Federal Government to enact legislation or take executive action to implement federal regulatory programs.² Thus, where Congress has the authority to regulate private activity under the commerce clause, the Federal Government may regulate that activity directly, but it may not require the states to do so. However, Congress can *encourage* a state to regulate in a particular way by offering "incentives" -- often in the form of federal funds. Congress may also create a "potential preemption" structure in which states must regulate the activity under state law according to federally approved standards or have state regulation pre-empted by federal regulation. The Clean Water Act (CWA) utilizes both of these techniques.

The Clean Water Act

Although the Federal Government probably has plenary power under the commerce clause to regulate any pollution that enters waters that are navigable, and can probably regulate any pollution that, in the aggregate, substantially affects interstate commerce, there is no such broad assertion of jurisdiction currently contained in the CWA. Instead, the CWA essentially grants the Federal Government authority over point sources and leaves the States with authority over nonpoint

¹ *Frequently Asked Questions Related to Development of Numeric Nutrient Criteria*, Fl. Dept. of Environmental Protection, Available at: <http://www.dep.state.fl.us/water/wqssp/nutrients/faq.htm>.

² *Printz v. United States*, 521 U.S. 898, 925 (1997); *New York v. United States*, 505 U.S. 144, 188 (1992).

sources. This approach aligns with historic jurisdictions. Point sources, as the name suggests, discharge pollutants from “any discernible, confined and discrete conveyance.” Point source regulation of pollution can best be visualized as “end-of-the-pipe” controls that clean up waste water before it is discharged into a water body. On the other hand, nonpoint source pollution can best be thought of as water runoff that picks up pollutants as it flows over the land itself. As a result, regulation of nonpoint source pollution typically relies on controls -- generally referred to as best management practices -- that directly modify how the land itself is used. Comprehensive federal regulation of nonpoint source pollution would thus probably engage the Federal Government directly in land use regulation--a type of regulation historically viewed as belonging to state and local levels of government.

The first legal regime established under the CWA is the National Pollutant Discharge Elimination System (NPDES), through which the EPA is authorized to directly regulate point source pollution. Under the NPDES program, all facilities which discharge pollutants from any point source into waters of the United States are required to obtain an NPDES permit. The primary focus of the NPDES permitting program is municipal (Publically Owned Treatment Works) and non-municipal (industrial) direct dischargers, and the primary mechanism for controlling discharges of pollutants to receiving waters is establishing effluent limitations. NPDES permits require a point source to meet established effluent limits, which are based on applicable technology-based and water quality-based standards. The intent of technology-based effluent limits in NPDES permits is to require a minimum level of treatment of pollutants for point source discharges based on the best available control technologies, while allowing the discharger to use any available control technique to meet the limits. However, technology-based effluent limits may not be sufficient to ensure that established water quality standards will be attained in the receiving water. In such cases, the CWA requires that more stringent, water quality-based effluent limits be required in order to ensure that water quality standards are attained.

The EPA will refrain from implementing its regulation of point sources under NPDES if it approves a state program which meets these purposes. Although this is commonly referred to as a “delegation” from the Federal Government, it is clear that the legal authority to administer the state program is not technically delegated from the Federal Government, but rather derives solely from state law (a state may submit to the EPA “a full and complete description of the program it proposes to establish and administer under state law” and there must be a statement from the Attorney General “that the laws of such state . . . provide adequate authority to carry out the described program”).³ This is a “potential preemption” structure. The Federal Government reviews the state program, and all actions taken under it, and can withdraw state program approval if a state fails to maintain federal standards or does not properly administer or enforce the state’s program.⁴ If the Federal Government withdraws approval of a state’s program, such action would compel the EPA to directly regulate point sources itself. In this situation, the CWA would preempt Florida’s statutes and rules relating to regulation of point sources.

The EPA and the DEP executed a Memorandum of Understanding (MOU) in 2007 delineating the state and federal agencies’ mutual responsibilities in the DEP’s administration of the federal NPDES program (the approved program). Pursuant to the MOU, the EPA acknowledges that the DEP has no veto authority over an act of the Florida Legislature, and reserves the right to initiate procedures for withdrawal of the state NPDES program approval in the event the Florida Legislature enacts legislation or issues any directive which substantially impairs the DEP’s ability to administer the NPDES program or to otherwise maintain compliance with NPDES program requirements. If the approved program were withdrawn, entities requiring a NPDES permit for activities relating to wastewater, stormwater, construction, industry, pesticide application, power generation, and some agricultural activities would need to acquire both federal and state permits.

The MOU anticipates situations when the EPA resumes authority over an individual permit and instances when DEP-submitted NPDES permits are disapproved by the EPA until the DEP adjusts the permit conditions to include EPA conditions on the permit. If the permit is issued by the DEP with EPA-imposed conditions, the permit holder may seek an administrative challenge to the DEP’s imposition of the conditions in the Florida Division of Administrative Hearings. If the permit is issued by the EPA, the permit holder may seek a federal appeal; however, in the meantime, the permit holder would be required to comply with the federal permit.

The second legal regime established under the CWA relates to water quality standards. In contrast to the NPDES regime’s focus on regulating specifically identified pollution sources, the water quality standards regime focuses on establishing the appropriate uses and condition of waters subject to the CWA. Water quality standards consist of three parts: designated uses of various water bodies, and specific water quality criteria based on these identified uses, and the anti-degradation requirements mentioned above.⁵ The DEP adopted Florida’s nutrient narrative water quality standards in chapter 62-302 of the Florida Administrative Code. While these standards are adopted by the state, if at any time the

³ 33 U.S.C. s. 1342(b).

⁴ 33 U.S.C. s. 1342(c).

⁵ 33 U.S.C. s. 1313(c)(2)(A).

EPA determines that a revised or new standard is necessary to meet the requirements of the CWA, the Administrator is authorized to adopt revised water quality standards.⁶

The CWA next requires Florida to identify waters for which existing pollution controls are not stringent enough to implement the established water quality standards and establish total maximum daily loads (TMDLs) for those waters. A TMDL does not, by itself, prohibit any conduct or require any actions. Instead, each TMDL represents a goal that must be implemented by adjusting pollutant discharge requirements in the individual NPDES permits under federal control and may be implemented with nonpoint source controls under state control.⁷ With respect to point sources, EPA regulations require that effluent limitations in NPDES permits be "consistent with the assumptions and requirements of any available wasteload allocation" in a TMDL. Nonpoint source reductions can be enforced against those responsible for the pollution only to the extent that the state institutes such reductions as regulatory requirements pursuant to state authority.⁸ The CWA merely requires states to undertake an assessment process to identify waters for which further controls on nonpoint sources of pollution may be needed, and provides financial incentives to encourage such further state regulations as may be necessary. The Act makes various federal grants available to the states to aid implementation of the plans and withholds funding for states with inadequate plans.⁹

Current Nutrient Regulation in Florida

Currently, DEP's rules apply a narrative nutrient criterion to waterbodies in Florida. The narrative criterion states, "[i]n no case shall nutrient concentrations of a body of water be altered so as to cause an imbalance in natural population of flora or fauna."¹⁰ DEP implements the narrative criterion through site-specific detailed biological assessment together with site-specific outreach to stakeholders. DEP does this in a variety of ways, including assessing whether specific water bodies are "impaired" under the CWA, developing TMDLs for watersheds, and setting wastewater discharge permit limits.

The derivation of specific numeric nutrient criteria to complement the narrative is very complex. Since nutrients are essential to life, a balance must be achieved to provide adequate nutrients to sustain aquatic life while preventing excessive nutrients that alter the aquatic ecosystem through species shifts. Each waterbody can have very different and unique nutrient requirements. In order to develop the thresholds at which a health aquatic environment can be sustained, it is necessary to develop a reliable measure of the biological condition of the waterbody.¹¹

The EPA has noted that this is a difficult, lengthy, and data-intensive undertaking, and ultimately concluded that the existing process was too time consuming, given the widespread impairment of Florida's water quality due to nutrient over-enrichment.¹² The DEP also recognized this problem, and over the last 10 to 12 years attempted to develop specific numeric nutrient criteria to complement its narrative criterion.

United States Environmental Protection Agency Numeric Nutrient Criteria Rulemaking

In July 2008, the Florida Wildlife Federation and other environmental groups sued EPA in an attempt to compel the EPA to adopt numeric nutrient criteria for Florida's waterbodies. In January 2009, EPA determined that numeric nutrient water quality criteria for Florida's waterbodies are necessary to meet the requirements of the CWA. EPA determined that Florida's narrative nutrient criteria alone was insufficient to ensure protection of applicable designated uses, but also recognized the ongoing efforts by DEP in developing a numeric nutrient criteria for Florida's waterbodies. The EPA noted that, "in the event that Florida adopts and EPA approves new or revised water quality standards that sufficiently address this determination before EPA promulgates federal water quality standards, EPA would no longer be obligated to promulgate federal water quality standards."

In August 2009, EPA settled the lawsuit and entered into a consent decree that required EPA to adopt numeric nutrient criteria for Florida's lakes, flowing waters, estuaries, and coastal waters. DEP suspended its rulemaking proceedings while EPA developed its rules to impose numeric nutrient criteria in Florida.

In December 2010, the EPA adopted final numeric nutrient criteria rules for all lakes and springs in the state and flowing waters outside of the southern Florida region in accordance with the consent decree and subsequent revisions. These rules are scheduled to take effect on March 6, 2012, but the EPA has proposed to extend the effective date to June 4, 2012, to allow EPA to work with DEP on state rules that will replace the EPA's rules if approved by the EPA. In addition, consistent with its obligations under the August 2009 consent decree, the EPA plans to adopt within the next year similar numeric nutrient limits for coastal and estuarine waters throughout the state and flowing waters in the southern region of

⁶ 33 U.S.C. s. 1313(c)(4)(B).

⁷ *Sierra Club v. Meiburg*, 296 F.3d 1021, 1025 (11th Cir.2002).

⁸ *Pronsolino v. Nastri*, 291 F.3d 1123 (9th Cir. 2002).

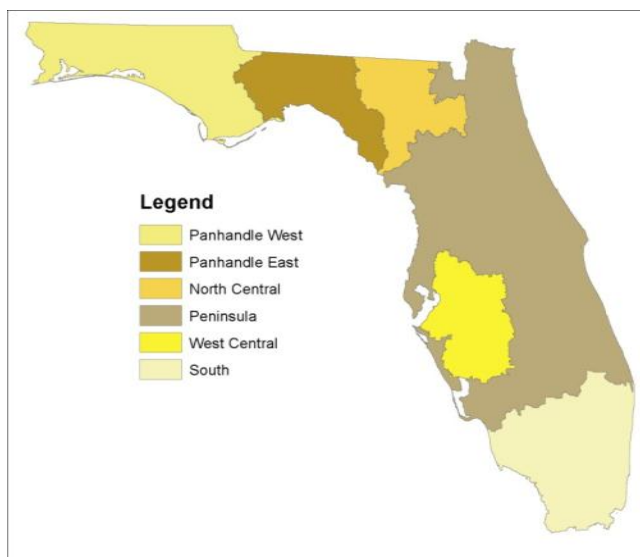
⁹ 33 U.S.C. s. 1329(h).

¹⁰ Section 62-302-530(47)(b), F.A.C.

¹¹ *Id.*

¹² See EPA 303(c)(4) January 2009 Determination Letter.

Florida. The following map indicates nutrient watershed regions of the state, which will be used to implement EPA's numeric nutrient criteria rules:



Also in December 2010, the State of Florida filed a lawsuit in federal district court against the EPA over the agency's intrusion into Florida's previously approved clean water program.¹³ The lawsuit alleges that the EPA's action is inconsistent with the intent of Congress when it based the Clean Water Act on the idea of cooperative federalism whereby the States would be responsible for the control of water quality with oversight by the EPA. Control of nutrient loading from predominately non-point sources involves traditional States' rights and responsibilities for water and land resource management which Congress expressly intended to preserve in the Clean Water Act. The lawsuit specifically alleges that the EPA rules and the EPA's January 2009 necessity determination for promulgating numeric nutrient criteria for Florida's waters are arbitrary, capricious, and an abuse of discretion, and requests the court to enjoin the EPA Administrator from implementing its numeric nutrient criteria rules in Florida. A hearing was recently held in the lawsuit, but the court has not issued a decision to date.

Unless DEP's proposed rules are adopted and approved by the EPA, the EPA's final rules for Florida's lakes and springs and flowing waters outside the southern region of Florida will take effect. In addition, the EPA will propose new numeric nutrient criteria rules for Florida's coastal and estuarine waters and flowing waters in the southern region of Florida by March 15, 2012, and finalize the criteria by November 15, 2012. In a letter to DEP dated June 13, 2011, EPA noted that, if the state adopts and the EPA approves protective nutrient criteria, the EPA will promptly initiate rulemaking to repeal the corresponding federally-promulgated numeric nutrient criteria. In a letter to Senator Marco Rubio dated December 1, 2011, EPA asserted that if the EPA formally approves DEP's final numeric nutrient criteria, the EPA will initiate rulemaking "to withdraw federal numeric nutrient criteria for any waters covered by the new and approved state numeric water-quality standards."

Florida Department of Environmental Protection Numeric Nutrient Criteria Rulemaking
(Please see Attachment 1 for a more detailed description of DEP's proposed rules.)

On November 2, 2011, the EPA affirmed its support of DEP's efforts to address nutrient pollution, noting that EPA *preliminarily* concluded that it would approve the draft rule submitted by DEP on October 24, 2011. However, EPA noted that a final decision to approve or disapprove any numeric nutrient criteria rule submitted by DEP will follow normal review of the rule and record.

On December 8, 2011, the Florida Environmental Regulation Commission modified and approved rule amendments to Chapters 62-302 and 62-303, F.A.C., as proposed by DEP, to address nutrient pollution in Florida waters in "an integrated, comprehensive, and consistent manner."¹⁴

DEP's rules and amendments set limits on the amount of phosphorus and nitrogen allowed in Florida's waters. The rules are designed to ensure water quality, protect public health and preserve well-balanced aquatic ecosystems throughout

¹³ *State of Florida v. Jackson*, Case 3:10-cv-00503-RV-MD (N.D. Fla. 2010).

¹⁴ DEP Proposed Rule 62-302.531(9).

Florida. The rules address the complexity of Florida's various aquatic ecosystems by focusing on site-specific analyses of each water body, allowing for consideration of natural factors that influence the effect nutrients have on aquatic plants and animals and identification of the most appropriate nutrient levels for each individual waterbody.

One of the rule provisions incorporated into DEP's proposed rules following approval by the Environmental Regulation Commission on December 8, 2011, is Rule 62-302.200(36), which expressly excludes the following from the definition of "stream":

(a) non-perennial water segments where fluctuating hydrologic conditions, including periods of desiccation, typically result in the dominance of wetland and/or terrestrial taxa (and corresponding reduction in obligate fluvial or lotic taxa), wetlands, or portions of streams that exhibit lake characteristics (e.g., long water residence time, increased width, or predominance of biological taxa typically found in non-flowing conditions) or tidally influenced segments that fluctuate between predominantly marine and predominantly fresh waters during typical climatic and hydrologic conditions; or

(b) ditches, canals and other conveyances, or segments of conveyances, that are man-made, or predominantly channelized or predominantly physically altered and;

1. are primarily used for water management purposes, such as flood protection, stormwater management, irrigation, or water supply; and

2. have marginal or poor stream habitat or habitat components, such as a lack of habitat or substrate that is biologically limited, because the conveyance has cross sections that are predominantly trapezoidal, has armored banks, or is maintained primarily for water conveyance.

Another rule provision incorporated into DEP's proposed rules following approval by the Environmental Regulation Commission on December 8, 2011, is Rule 62-302.531(9), which affirms the unified and cohesive approach of the proposed rules by stating:

The Commission adopts rules 62-302.200(4), .200(16)-(17), .200(22)-(25), .200(35)-(37), .200(39), 62-302.531, and 62-302.532(3), F.A.C., to ensure, as a matter of policy, that nutrient pollution is addressed in Florida in an integrated, comprehensive and consistent manner. Accordingly, these rules shall be effective only if EPA approves these rules in their entirety, concludes rulemaking that removes federal numeric nutrient criteria in response to the approval, and determines, in accordance with 33 U.S.C. § 1313(c)(3), that these rules sufficiently address EPA's January 14, 2009 determination. If any provision of these rules is determined to be invalid by EPA or in any administrative or judicial proceeding, then the entirety of these rules shall not be implemented.

The EPA has not expressed preliminary approval of the modifications to DEP's initial proposed rule that were approved by the Florida Environmental Regulation Commission on December 8, 2011, and subsequently incorporated into DEP's current proposed rules.

On December 1, 2011, the Florida Wildlife Federation, Inc., the Sierra Club, Inc., the Conservancy of Southwest Florida, Inc., the Environmental Confederation of Southwest Florida, Inc., and St. Johns Riverkeeper, Inc. filed an administrative rule challenge at the Florida Division of Administrative Hearings.¹⁵ The rule challenge seeks to invalidate the DEP's proposed numeric nutrient criteria rules because "contrary to FDEP's claims, the rules are not designed to protect state waters from the adverse impacts of nutrient overenrichment. Instead, these rules go so far as to prevent a finding of impairment due to nutrients until the waterbody is covered with nutrient-fueled toxic blue-green algae (cyanobacteria)."¹⁶ The challenge asserts that certain provisions of the proposed rules are invalid exercises of delegated legislative authority.¹⁷ The hearing in the case has been scheduled for February 27, 2012, through March 2, 2012.

Until the Administrative Law Judge issues an order in the administrative rule challenge proceeding, DEP is prohibited by law from filing the proposed rules for adoption as final rules. For purposes of compliance with the federal Clean Water Act, DEP's *adopted* rules must be approved by the EPA in order to replace the EPA's final numeric nutrient criteria rules for Florida's lakes and springs and flowing waters outside of the southern region, which are scheduled to take effect March 6, 2012, unless extended to June 4, 2012, as proposed by the EPA.

¹⁵ *Florida Wildlife Federation, et al. v. Fl. Dept. of Environmental Protection*, DOAH Case No: 11-006137RP.

¹⁶ *Florida Wildlife Federation, et al. v. Fl. Dept. of Environmental Protection*, DOAH Case No: 11-006137RP, Petition to Invalidate Existing and Proposed Rules of the Florida Department of Environmental Protection, p.2.

¹⁷ The petition does not challenge proposed Rule 62-302.531(9) as approved by the Environmental Regulation Commission on December 8, 2011.

Differences Between DEP's Rules and EPA's Rules

DEP summarizes the differences between the EPA's rules and DEP's rules as follows:

- DEP's rules give preference to nutrient site specific science, EPA's do not;
- DEP's rules only create nutrient reduction expectations where necessary to protect Florida waterbodies, EPA's rules create those expectations regardless of waterbody health; and
- DEP's rules eliminate unnecessary procedures that do not add to waterbody protection and restoration, while the EPA's rules use federal procedures to overcome illogical outcomes.¹⁸

Legislative Ratification

In 2010, the Legislature enacted new s. 120.541(3), F.S., which requires rules that have certain economic impacts to be ratified by the Legislature before taking effect.¹⁹ The Statement of Estimated Regulatory Costs mandated by s. 120.541(2)(a), F.S., must address a rule's direct or indirect economic impact during the 5 years following agency implementation of the rule, including an analysis of whether the rule is likely to:

1. Have an adverse impact on economic growth, private-sector job creation or employment, or private-sector investment;²⁰
2. Have an adverse impact on business competitiveness,²¹ productivity, or innovation;²² and
3. Increase regulatory costs, including any transactional costs.²³

If the analysis shows the projected impact of the rule in any one of these areas will exceed \$1 million in the aggregate for the 5 year period, the rule cannot go into effect until ratified by the Legislature pursuant to s. 120.541(3), F.S.

Present law distinguishes between a rule being "adopted" and becoming enforceable or "effective."²⁴ A rule must be filed for adoption before it may go into effect²⁵ and cannot be filed for adoption until completion of the rulemaking process.²⁶ A rule projected to have a specific economic impact exceeding \$1 million in the aggregate over 5 years²⁷ must be ratified by the Legislature before going into effect.²⁸ As a rule submitted under s. 120.541(3), F.S., becomes effective if ratified by the Legislature, a rule must be filed for adoption before being submitted for legislative ratification.

The economic impact of DEP's proposed numeric nutrient criteria rules is estimated to exceed the economic impact dollar thresholds for ratification. On December 9, 2011, DEP submitted its proposed rule amendments to the Legislature for ratification, but DEP has been unable to adopt the rules due to the ongoing administrative rule challenge. A hearing in the administrative rule challenge is scheduled from February 27, 2012 through March 2, 2012. DEP is not allowed by law to file the proposed rules for final adoption until after a decision is issued by the Administrative Law Judge in the administrative rule challenge, which is unlikely to occur until after the 2012 Regular Session concludes on March 9, 2012. Thus, it is highly unlikely that DEP's adopted rules will be available for ratification by the Legislature during the 2012 Regular Session.

B. SECTION DIRECTORY:

Section 1 exempts DEP's proposed numeric nutrient criteria rules, as approved by the Florida Environmental Regulation Commission on December 8, 2011, from the legislative ratification requirement in s. 120.541(3); requires DEP to publish, when the rules are adopted, notice of the exemption from ratification; requires legislative ratification of any subsequent rule or amendment altering the effect of proposed Rule 62-302.531(9); and requires DEP to submit its proposed numeric nutrient rules to the EPA for review under the Clean Water Act within 30 days after the effective date of this bill.

Section 2 provides that the act is effective upon becoming law.

¹⁸ Drew Bartlett, Director, Div. of Environmental Assessment and Restoration, Fl. Dept. of Environmental Protection, Presentation for Legislative Committee Staff, Dec. 1, 2011.

¹⁹ Ch. 2010-279, Laws of Florida.

²⁰ s. 120.541(2)(a)1., F.S.

²¹ Including the ability of those doing business in Florida to compete with those doing business in other states or domestic markets.

²² s. 120.541(2)(a) 2., F.S.

²³ s. 120.541(2)(a) 3., F.S.

²⁴ s. 120.54(3)(e)6. Before a rule becomes enforceable, thus "effective," the agency first must complete the rulemaking process and file the rule for adoption with the Department of State.

²⁵ s. 120.54(3)(e)6, F.S.

²⁶ s. 120.54(3)(e), F.S.

²⁷ s. 120.541(2)(a), F.S.

²⁸ s. 120.541(3), F.S.

II. FISCAL ANALYSIS & ECONOMIC IMPACT STATEMENT

A. FISCAL IMPACT ON STATE GOVERNMENT:

1. Revenues: None.
2. Expenditures: None.

B. FISCAL IMPACT ON LOCAL GOVERNMENTS:

1. Revenues: None.
2. Expenditures: See Fiscal Comments

C. DIRECT ECONOMIC IMPACT ON PRIVATE SECTOR: See Fiscal Comments

D. FISCAL COMMENTS:

DEP Proposed Numeric Nutrient Criteria Rules

Although this bill does not have a direct fiscal impact, if DEP's proposed numeric nutrient criteria rules are implemented and applied to all Florida waters, the DEP estimates that implementation will cost affected parties between \$51 and \$150 million annually. These costs are significantly less than the estimated cost to implement the final EPA rules for Florida's lakes and springs and flowing waters outside of the southern region, which are scheduled to take effect on March 6, 2012, unless the effective date is extended to June 4, 2012, as proposed by the EPA.

Please see Attachment 2 for a more detailed discussion of the costs associated with implementing DEP's proposed rules and the EPA's final rules for Florida's lakes and springs and flowing waters outside of the southern Florida region.

EPA Final Numeric Nutrient Rules for Florida's Lakes and Springs and Flowing Waters Outside the Southern Region of Florida

EPA published a cost estimate with its final numeric nutrient criteria rules for lakes and springs throughout the state and for flowing waters outside of the southern region. The EPA estimated that annual direct compliance costs of \$135.5 to \$206.1 million. Unlike DEP's proposed numeric nutrient criteria rules, the EPA's rules do not include the cost of implementing future EPA rules that will apply to estuarine waters and coastal waters throughout the state as well as to flowing waters in the southern region of Florida. A National Academy of Sciences independent review of EPA's cost analysis is expected to be published in February 2012.

The DEP and other affected parties strongly disagree with the EPA's cost estimates and assert that actual costs of compliance will be significantly higher. Cardno ENTRIX performed an independent cost analysis at the request of affected parties, estimating the cost of implementing EPA's final numeric nutrient criteria rules for lakes and springs throughout the state and flowing waters outside of the southern region waters to be between \$298 million and \$4.7 billion annually, depending on the manner in which the rules are implemented.

III. COMMENTS

A. CONSTITUTIONAL ISSUES:

1. Applicability of Municipality/County Mandates Provision: Not applicable.
2. Other: None.

B. **RULE-MAKING AUTHORITY:** The bill does not grant additional rulemaking authority; however, the bill does specify that proposed Rule 62-302.531(9), a non-severability and effective date provision approved by the Florida Environmental Regulation Commission on December 8, 2011, was approved in accordance with the commission's legislative authority granted in s. 403.804, F.S.

C. **DRAFTING ISSUES OR OTHER COMMENTS:** None.

IV. AMENDMENTS/COMMITTEE SUBSTITUTE CHANGES

None.

ATTACHMENT 1
FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
DESCRIPTION OF PROPOSED STATE NUMERIC NUTRIENT CRITERIA RULES

The Florida Department of Environmental Protection has crafted water quality standards on the amount of phosphorus and nitrogen, also known as “nutrients,” that would protect Florida’s lakes, rivers, streams, springs, and estuaries. The rules were approved for adoption by the Environmental Regulation Commission (ERC) on December 8, 2011.

This rule sets numeric standards to prevent harm to the natural population of aquatic plants and animals. This numeric expression of the nutrient criteria allows for much more effective and efficient analysis of nutrient conditions. The most accurate criteria are numeric expressions set through site specific analyses of a waterbody. The site specific approach better accounts for many natural factors that influence the actual effect of nutrients on aquatic conditions. Where those site specific analyses do not exist, this rule provides other numeric expectations for nutrients and related biological conditions.

Rule Structure

The *long-standing narrative* nutrient criterion, which was established to address harmful nutrient concentrations, will continue to apply to all waterbodies. This rule adds a *numeric* interpretation of that criteria as well as biological measurements for each waterbody in the following priority manner:

Approach 1

Established waterbody specific nutrient thresholds (like Total Maximum Daily Loads, Site Specific Criteria, and other actions by the Department) constitute the numeric expression.

- This rule also establishes estuary specific criteria for a number of estuaries in southern Florida and sets a schedule for the establishment of numeric values for the remaining estuaries.

Approach 2

If “Approach 1” (above) is not applicable, the numeric interpretation of the narrative criteria for a specific waterbody would be based on established, quantifiable nutrient cause and effect relationships between nutrient concentrations and impacts to the aquatic biology. Such relationships are currently available for lakes and springs.

- Lake criteria are set depending on the expected unimpacted condition of each lake (relative to its color and hardness). The numeric expectation for nutrients can also be adjusted within a defined range of possible nutrient concentrations when indicators show no biological imbalance in the lake’s aquatic plants and animals. The following table contains the lake criteria:

Long Term Lake Color and Hardness	Annual Chlorophyll a (algae)	Minimum calculated numeric interpretation		Maximum calculated numeric interpretation	
		Annual Total Phosphorus	Annual Total Nitrogen	Annual Total Phosphorus	Annual Total Nitrogen
High Color	20 µg/L	0.05 mg/L	1.27 mg/L	0.16 mg/L ¹	2.23 mg/L
Low Color; Hard Water	20 µg/L	0.03 mg/L	1.05 mg/L	0.09 mg/L ¹	1.91 mg/L
Low Color; Soft Water	6 µg/L	0.01 mg/L	0.51 mg/L	0.03 mg/L ¹	0.93 mg/L

1: For lakes with high color in the West Central Nutrient Watershed Region, the maximum TP limit shall be the 0.49 mg/L TP streams threshold for the region.

- Proposed spring criteria are established for nitrate/nitrite (a form of nitrogen). For spring vents, the standard is 0.35 mg/L of nitrate/nitrite as an annual geometric mean, not to be exceeded more than once in any three calendar year period.

Approach 3

If "Approaches 1 and 2" (above) are not applicable for a stream, attainment of nutrient criteria is determined using a combination of reference-based nutrient thresholds and measurements of biological indicators. This approach is currently only available for perennial streams. For a waterbody to be in attainment:

- information on algae, plant growth, and plant community structure must indicate there are no biological impacts; and either
- measures of aquatic animals indicate healthy conditions, or
- nutrient thresholds set forth in the table below are achieved.

Nutrient Watershed Region	Total Phosphorus Nutrient Threshold²	Total Nitrogen Nutrient Threshold²
Panhandle West	0.06 mg/L	0.67 mg/L
Panhandle East	0.18 mg/L	1.03 mg/L
North Central	0.30 mg/L	1.87 mg/L
Peninsular	0.12 mg/L	1.54 mg/L
West Central	0.49 mg/L	1.65 mg/L
South Florida	No numeric nutrient threshold. The narrative criterion continues to apply.	

2: These values are annual geometric mean concentrations not to be exceeded more than once in any three calendar year period.

As a safety measure, the rules contain provisions to monitor for and address increasing trends in nutrient concentrations, as well as a specific provision that prohibits upstream nutrient concentrations at levels that would harm a downstream waterbody. For the remaining waterbodies, including wetlands waterbodies that do not flow year-round and manmade ditches, canals and other artificial waterbodies, including canals generally located south of Lake Okeechobee, the narrative nutrient criteria will continue to apply until numeric expressions can be scientifically derived.

Implementation of Numeric Nutrient Criteria

These standards apply to the ambient water quality condition. As such, they can be used to guide permitting decisions and used to identify waterbodies in need of restoration plans. If a regulated source discharges into a waterbody whose ambient condition does not attain these standards, its permit would need to be issued in a manner that ensures the discharge is not a contributor to the nonattainment condition. As well, nonattainment of these standards can help identify waterbodies for future restoration activities, such as a Total Maximum Daily Load. Since the TMDL is a site specific analysis, it can be used to establish precise site specific criteria for the waterbody under these rules.

ATTACHMENT 2
FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
FISCAL ANALYSIS OF PROPOSED STATE NUMERIC NUTRIENT CRITERIA RULES

The FSU Center for Economic Forecasting and Analysis (CEFA) performed an initial economic analysis of FDEP's Numeric Nutrient Standards approved by the Environmental Regulation Commission on December 8, 2011. Estimates of the costs potentially associated with the FDEP proposed rule were provided to FSU CEFA by FDEP, and cost analysis was performed by FSU CEFA for five industry sectors that may incur costs to reduce nutrients sufficiently for Florida's waters to be in compliance with the proposed rule. It was assumed that such costs would potentially be incurred by entities in waterbodies which do not appear to achieve the standards, based on an assessment by FDEP. Costs for domestic and industrial wastewater facilities were estimated based on the cost associated with upgrading those facilities to advanced wastewater treatment. Costs for agricultural and urban stormwater were based on the acreage and cost associated with BMP implementation for those waterbodies²⁹. Costs for septic tanks were based on the number of affected systems and costs associated with their upgrade. The initial estimate³⁰ was revised to reflect the rule adopted on December 8th, 2011. The revised estimate is:

Sector	Estimated Annual Costs (Million \$)		
	Low Cost	High Cost	Median Cost
Industrial Wastewater	\$3.4	\$35	\$10
Domestic Wastewater	\$1.8	\$4.5	\$2.4
Urban Stormwater	\$16	\$64	\$32
Agricultural Stormwater	\$20	\$20	\$20
Septic Tanks	\$9	\$26	\$11
Total	\$51	\$150	\$75

The Department's rule represents a significant cost saving in comparison to the recently-adopted U.S. EPA rule. Estimates of those costs were performed by Cardno ENTRIX³¹ with two sets of assumptions. The first was that the levels of treatment necessary to achieve the criteria would be similar to those assumed for the Department's rule; the second was that the EPA criteria would have to be met at the point of discharge. The difference between these two scenarios and the large range in costs is due to uncertainty associated with how the EPA criteria implementation. The Cardno ENTRIX estimated costs were:

Sector	Estimated Annual Costs (Million \$)					
	Level of Technology Assumptions			Point of Discharge Assumptions		
	Low Cost	High Cost	Median Cost	Low Cost	High Cost	Median Cost
Industrial Wastewater	\$164	\$372	\$270	\$1,492	\$2,437	\$1,975
Domestic Wastewater	\$17	\$66	\$41	\$314	\$480	\$395
Urban Stormwater	\$25	\$115	\$61	\$312	\$1,075	\$629
Agricultural Stormwater	\$24	\$42	\$33	\$853	\$1,088	\$969
Septic Tanks	\$2	\$18	\$8	\$39	\$347	\$133
Total	\$298	\$533	\$415	\$3,424	\$4,702	\$4,037

²⁹ Based on FDEP delineation of waterbodies by Waterbody Identification (WBID).

³⁰ Based on removal of costs associated with canals from the total cost analyses.

³¹ *Addendum to the Economic Analysis of the Federal Numeric Nutrient Criteria for Florida*. Prepared for the Florida Water Quality Coalition by Cardno ENTRIX. July 2011.

The U.S. EPA also performed an economic analysis with the promulgation of their criteria for inland lakes and flowing waters in December 2010. That estimate is reflected in the table below.

EPA Estimate of Potential Annual Costs Associated with Numeric Nutrient Criteria		
Source Sector	Type of Expenditure	Annual Costs (millions)
Municipal Wastewater	Biological Nutrient Removal (BNR) to reduce TN and/or TP	\$22.3 - \$38.1
Industrial Dischargers	BNR to reduce TN and TP; chemical precipitation to reduce TP	\$25.40
Urban Stormwater	Stormwater controls	\$60.5 - \$108.0
Agriculture	Owner/typical BMP program	\$19.9 - \$23.0
Septic Systems	Upgrade to advanced nutrient treatment	\$6.6 - \$10.7
Government/Program Implementation	TMDL development	\$0.90
Total	--	\$135.5-\$206.1

The U.S. EPA estimate is based on the Department making future site specific water quality standards changes to provide relief. However, such future standards changes are too uncertain for current cost estimation purposes. Therefore, for comparison with FSU's estimates, the Department recommends relying on the Cardno ENTRIX estimate.